**Lower Granite**
WA0026794

| Agency | Contact | Outfall # |
|---|---|---|
| USACE, Walla Walla | Don Redman | 1 |
| | | 2 |
| | | 3 |
| | | 4 |
| | | 5 |
| | | 6 |
| | | 7 |
| | | 8 |
| | | 9 |
| | | 10 |
| | | 11 |
| | | 12 |
| | | 13 |

Need more info on:
Background
Generally speaking:

Summary:
Level of difficulty:
Level of information:

**Outfall description**
drainage sump
unwatering sump
generator cooling water unit 1
generator cooling water unit 2
generator cooling water unit 3
generator cooling water unit 4
generator cooling water unit 5
generator cooling water unit 6
heat pump non-contact cooling water

adult fish trap discharge
CNO sump discharge (2 pumps with two discharges from one sump)
JFF Conex Lab discharge

JFF WET Lab Discharge

monitoring data in XL sheet; info on Outfalls 11-13; other pollutants of concern
for adult fish trap, fish ladder, locks, irrigation, anesthetizing baths
TSS, COD, TOC, ammonia
higher levels of BOD and other pollutants different from other hydros
13 outfalls grouped in sumps, non-contact cooling water, **fish ladder, locks, anesthetizing agents**
average-high;

**Pollutants Detected**
TSS, oil and grease, COD, TOC, ammonia
TSS, TOC, ammonia
TSS, COD, TOC, ammonia
BOD, TSS, COD, TOC, ammonia
BOD, TSS, COD, TOC, ammonia
no info but operator believes similar to discharges from outfalls 3 and 4
no info but operator believes similar to discharges from outfalls 3 and 5
no info but operator believes similar to discharges from outfalls 3 and 6
BOD, TSS, COD, TOC, ammonia

BOD, TSS, COD, TOC, ammonia
BOD, TSS, oil and grease, COD, TOC, ammonia
no info

BOD, COD, TOC, ammonia

**Notes**

highest concentrations; when adult fish trap is in use, constant flow of water through system; periodicallt, holding tanks with MS-222 are drained into this line

anesthetizing baths - MS-222 is discharged when in use.
March to October, with discharges from anesthetizing baths; contains MS-222.

Little Goose
WA0026786

Need info on:
Most significant discharges from locks

Summary:
Level of difficulty:

| Agency | Contact | Outfall # | Outfall description |
|---|---|---|---|
| USACE, Walla Walla | Don Redman | 1 | drainage sump |
| | | 2 | unwatering pump |
| | | 3 | heat pump outfall |
| | | 4 | emergency diesel generator cooling water |
| | | 5 | Cooling water discharge unit 1 |
| | | 6 | Cooling water discharge unit 2 |
| | | 7 | Cooling water discharge unit 3 |
| | | 8 | Cooling water discharge unit 4 |
| | | 9 | Cooling water discharge unit 5 |
| | | 10 | Cooling water discharge unit 6 |
| | | 11 | North shore diesel generator drain |
| | | 12 | north shore sump pump #2 drain |
| | | 13 | navigation lock fill valve sump |
| | | 14 | visitors center A.C drain |
| | | 15 | Navigation lock drainage |
| | | 16 | juvenile fish facility discharge from wet lab |

XL spreadsheet monitoring data, locks

16 outfalls grouped in sumps, non-contact cooling water, **fish ladder, locks, anesthetizing agent in outfall 16**
Average-high

**Pollutants Detected**

TSS, oil and grease, COD, TOC, ammonia
TSS, oil and grease, COD, TOC, ammonia
TSS, COD, TOC, ammonia
TOC, ammonia

BOD, TSS, Oil and grease, COD, TOC, ammonia
BOD, TSS, Oil and grease, COD, TOC, ammonia

BOD, TSS, Oil and grease, COD, TOC, ammonia
BOD, TSS, Oil and grease, COD, TOC, ammonia
BOD, TSS, Oil and grease, COD, TOC, ammonia
BOD, TSS, Oil and grease, COD, TOC, ammonia
TSS, Oil and grease, TOC
oil and grease, TOC, ammonia
BOD, TSS, TRC, Oil and grease, COD, TOC, ammonia
oil and grease, TOC, ammonia
BOD, TSS, TRC, Oil and grease, COD, TOC, ammonia

BOD, TSS, TRC, Oil and grease, COD, TOC, ammonia

**Notes**

Rcvs drainage from various sources, estimated flow rate
Drains water from several places

small amounts; rarely in use

all cooling water discharges are substantially the same

no samples taken, but notes in outfalls 5 and 6 indicate that discharge quality of outfalls 5-10 are virtually the same

small amounts; rarely in use

pump is rarely operated
drains potable water from AC unit
highest levels of all outfalls

low but detectable concentrations, MS-222 in discharges

Lower Monumental
WA0026808

Need more info on:
Largest values

Summary:
Level of difficulty:

| Agency | Contact | Outfall # | Outfall description |
|---|---|---|---|
| USACE, Walla Walla | Don Redman | 1 | drainage sump |
| | | 2 | unwatering sump |
| | | 3 | heat pump |
| | | 4 | emergency diesel generator cooling discharge |
| | | 5 | generator cooling water unit 1 |
| | | 6 | generator cooling water unit 2 |
| | | 7 | generator cooling water unit 3 |
| | | 8 | generator cooling water unit 4 |
| | | 9 | generator cooling water unit 5 |
| | | 10 | generator cooling water unit 6 |
| | | 11 | Transformer tailwater discharge |
| | | 12 | Anesthetizing tanks |
| | | 13 | Holding tanks |

XL spreadsheet with data; questions on outfall 11 - notes in application say that discahrges may go to drainage sump; fish holding tanks for BOD

13 outfalls grouped in sumps, non-contact cooling water, **anesthetizing tanks**
average

**Pollutants Detected**
TSS, COD, TOC
TSS, TOC
BOD, TSS, COD, TOC
TSS, oil and grease, TOC, ammonia
no info but similar discharges from outfalls 5-10
no info but similar discharges from outfalls 5-11
TSS, TOC
TSS, TOC
no info but similar discharges from outfalls 5-10
no info but similar discharges from outfalls 5-10
TSS, TRC, oil and grease, TOC
BOD, TSS, COD, TOC, ammonia
TSS, COD, TOC, Ammonia

**Notes**
collects water from various sources; runs very little in summer and continuously in winter
regularly collects extra water from drainage sump overflow in winter
runs continuously in summer and winter and intermittently in spring and fall

Unclear from application whether this is still operational or all discharges going to drainage sump pump
juvenile fish passage; high BOD (30 mg/L)
juvenile fish passage; low BOD in application

**Ice Harbor**
WA0026816

Need info on:

Summary:
Level of difficulty:

| Agency | Contact | Outfall # | Outfall description |
|---|---|---|---|
| USACE, Walla Walla | Don Redman | 1 | drainage sump |
| | | 2 | unwatering sump |
| | | | North non-overflow drainage sump |
| | | 3 | discharge |
| | | | South fish pumphouse unwatering |
| | | 4 | sump discharge |
| | | | MU 1 Air Cooler non-contact cooling |
| | | 5 | water |
| | | | MU1 Thrust bearing non-contact |
| | | 6 | cooling water |
| | | | MU2 Air Cooler non-contact cooling |
| | | 7 | water |
| | | | MU2 Thrust bearing non-contact |
| | | 8 | cooling water |
| | | | MU3 Air Cooler non-contact cooling |
| | | 9 | water |
| | | | MU3 Thrust bearing non-contact |
| | | 10 | cooling water |
| | | 11 | MU4 Non-contact cooling water |
| | | 12 | MU5 Non-contact cooling water |
| | | 13 | MU6 Non-contact cooling water |
| | | 14 | Drainage and unwater sump discharge |
| | | 15 | HVAC discharge |
| | | 16 | Transformer Cool 1-1 |
| | | 17 | Transformer Cool 1-2 |
| | | 18 | Transformer Cool 2-1 |
| | | 19 | Transformer Cool 2-2 |
| | | 20 | Transformer Cool 3-1 |

XL spreadsheet with data, fish ladder, locks,
outfalls 11-13,

21 outfalls grouped in sumps, non-contact
cooling water; questions on fish ladder and locks,
**fish pumphouse**
average-high

| **Pollutants Detected** | **Notes** |
|---|---|
| TSS, TOC | Nav lock pump 3, info in permit |
| BOD, TSS, TRC, Oil and grease, COD, TOC | Navlock Pump 4 |
| TSS, TOC | Navlock pump 8 |
| TSS, TOC | Pump 9 |
| TSS, TOC | Discharges from 6, 8, 10 are the same |
| TSS, TOC<br>no info, but operator believes discharges from 5,7,9 are the same | Discharges from 5, 7, 9 are the same |
| no info but operator believes similar to discharges from outfalls 6,8, and 10 are the same<br>no info, but operator believes discharges from 5,7,9 are the same | |
| no info but operator believes similar to discharges from outfalls 6,8, and 10 are the same<br>no info but operator believes similar to discharges from outfalls 11-13 are the same | no info |
| no info but operator believes similar to discharges from outfalls 11-13 are the same | no info |
| no info but operator believes similar to discharges from outfalls 11-13 are the same | no info |
| TSS, oil and grease, TOC<br>BOD, TSS, COD, TOC<br>TSS, TOC, Ammonia<br>TSS, TOC<br>no info, but operator believes discharges from 16-21 are similar<br>no info, but operator believes discharges from 16-21 are similar<br>no info, but operator believes discharges from 16-21 are similar | |

21 Transformer Cool 3-2

no info, but operator believes discharges from 16-21 are similar

McNary

Need info on:

WA0026824

Summary:
Level of difficulty:

| Agency | Contact | Outfall # | Outfall description |
|---|---|---|---|
| USACE, Walla Walla District | Don Redman | 21 | Navigation Lock Upstream Sump |
| | | 22 | Navigation Lock Downstream Sump |

any XL spreadsheet data

2 outfalls on WA side , **no fish tanks**
Easier

**Pollutants Detected**
BOD, TSS, COD, TOC, Ammonia
BOD, TSS, oil and grease, COD, TOC, Ammonia

**Notes**

3 sump pumps, floor drains, and joint leakage

2 sump pumps, floor drains, roof drains, joint leakage; intermittent

**John Day**
WA0026832

Need more info on:
Background
Generally speaking:
Summary:
Level of difficulty:
Level of information:

| Agency | Contact | Outfall # | Outfall description |
|---|---|---|---|
| USACE, Portland | Ken Duncan | 18 | MU15 Non-contact cooling water |
| | | 19 | MU 16 Non-contact Cooling Water |
| | | 20 | Unwatering Sump Pump 3 |
| | | 21 | Unwatering Sump Pump 4 |
| | | 23 | CNO Pumps 9, 10, 11 |
| | | 26 | Spillway Drainage SumpPUmps 8, 8A |
| | | 27 | Nav Lock Fill Valve Tainter 4 |
| | | 28 | Nav Lock Drainage Sump 3 |
| | | 29 | Nav Lock Pump 4 |
| | | 43 | Powerhouse HVAC Cooling Water |

any XL spreadsheet with more pollutant info
TSS, COD, TOC, Ammonia
10 outfalls with **no fish tank discharges**

easier

**Pollutants Detected**
ND for oil and grease
TSS, TOC, Ammonia
TSS, TOC
unable to sample
TOC
TOC
no water at time of sampling
BOD, TSS, TOC
TOC, ammonia
TSS, TOC

**Notes**

Nav lock drains sump 3 discharge wastewater originates in the fish pump pits and drain valves (tainter valves) 1 and 2 discharge water originates from uplift drains and expansion joints

The Dalles

WA0026701

Information needed

Summary:
Level of difficulty:

Background

| Agency | Contact | Outfall # | Outfall description |
|---|---|---|---|
| USACE, Portland | Ken Duncan | 1 | Unwatering sump |
| | | 2 | Drainage sump |
| | | 3 | MU 1&2 Non-Contact Cooling Water |
| | | 4 | MU 3&4 Non-Contact Cooling Water |
| | | 5 | MU 5&6 Non-Contact Cooling Water |
| | | 6 | MU 7&8 Non-Contact Cooling Water |
| | | 7 | MU 9&10 Non-Contact Cooling Water |
| | | 8 | MU 11&12 Non-Contact Cooling Water |
| | | 9 | MU 13&14 Non-Contact Cooling Water |
| | | 10 | MU 15&16 Non-Contact Cooling Water |
| | | 11 | MU 17&18 Non-Contact Cooling Water |
| | | 12 | MU 19&20 Non-Contact Cooling Water |
| | | 13 | MU 21&22 Non-Contact Cooling Water |
| | | 14 | ***Fish Units 1 &2 Cooling Water*** |
| | | 15 | ***South Spillway Sump*** |
| | | 16 | ***North Spillway Sump*** |
| | | 17 | Navigation Lock Drainage Sump |
| | | 18 | Transformer Cooling Water #1 |
| | | 19 | Transformer Cooling Water #2 |
| | | 20 | Transformer Cooling Water #3 |
| | | 21 | Transformer Cooling Water #4 |
| | | 22 | Transformer Cooling Water #5 |
| | | 23 | Transformer Cooling Water #6 |
| | | 24 | Transformer Cooling Water #7 |
| | | 25 | Transformer Cooling Water #8 |
| | | 26 | Transformer Cooling Water #9 |
| | | 27 | Transformer Cooling Water #10 |
| | | 28 | Transformer Cooling Water #11 |
| | | 29 | Transformer Cooling Water #12 |
| | | 30 | Transformer Cooling Water #13 |
| | | 31 | Transformer Cooling Water #14 |
| | | 32 | Station Service 01 & 02 Cooling Water |
| | | 33 | Transformer T04 Cooling Water |

| | | |
|---|---|---|
| Any monitoring data or info on Outfalls 4 -32; XL spreadsheets with monitoring data; (check out info on other operations, e.g., fish ladders) 34 outfalls grouped in sumps, non-contact cooling water average-high | | |
| TOC | | |
| **Pollutants Detected** | **Notes** | |
| COD, TOC, Ammonia, TSS | 34 outfalls are in Washington | non-contact cooling water, |
| COD, TOC,TSS | | |
| COD, TOC, TSS | | |
| TOC | | |

34 Transformer T01 Cooling Water

TOC

Bonneville

Need info on:

WA0026778

Summary:
Level of difficulty:

| Agency | Contact | Outfall # | Outfall description |
|---|---|---|---|
| USACE, Portland | Ken Duncan | 1 | ***Fish Unit #2 Non-contact cooling water*** |
| | | 2 | ***Fish Unit #1 Non-contact cooling water*** |
| | | 3 | CAC2 |
| | | 4a | MU18 Non-Contact Cooling Water |
| | | 4b | MU 18 Thrust Bearing Cooling Water |
| | | 5a | MU17 Non-Contact Cooling Water |
| | | 5b | MU 17 Thrust Bearing Cooling Water |
| | | 6a | MU16 Non-Contact Cooling Water |
| | | 6b | MU 16 Thrust Bearing Cooling Water |
| | | 7a | MU15 Non-Contact Cooling Water |
| | | 7b | MU 15 Thrust Bearing Cooling Water |
| | | 8a | MU14 Non-Contact Cooling Water |
| | | 8b | MU 14 Thrust Bearing Cooling Water |
| | | 9a | MU13 Non-Contact Cooling Water |
| | | 9b | MU 13 Thrust Bearing Cooling Water |
| | | 10a | MU12 Non-Contact Cooling Water |
| | | 10b | MU 12 Thrust Bearing Cooling Water |
| | | 11a | MU11 Non-Contact Cooling Water |
| | | 11b | MU 11 Thrust Bearing Cooling Water |
| | | 12 | OWS |
| | | 13 | CAC1 |
| | | 14 | Unwatering Sump |
| | | 15 | Drainage Sump |

XL spreadsheet with data sets; fish ladder info - operations and monitoring

23 outfalls grouped in sumps, non-contact cooling water, **fish units**
average-high

**Pollutants Detected**

oil and grease, TSS, TOC

TSS, TOC,
TSS, TOC,
TSS, TOC,
TSS, TOC, ammonia
TSS, TOC
TSS, TOC
TOC
BOD, TOC
TSS, TOC
TSS, TOC
BOD, TSS, TOC
BOD, TSS, TOC
TSS, TOC
BOD, TSS, TOC
TSS, TOC
TSS, TOC
none
none
TSS
TSS, TOC
TSS
TSS, TOC

**Notes**

23 outfalls are in Washington

includes fish ladder -check out conditions

Grand Coulee

WA0026867

| Agency | Contact | Outfall # |
|---|---|---|
| Idaho BOR | | 1 |
| | | 2 |
| | | 3 |
| | | 4a |
| | | 4b |
| | | 5 |
| | | 6 |
| | | 7 |
| | | 8 |
| | | 8b |
| | | 9a |
| | | 9b |
| | | 10 |
| | | 11 |

Permittee also seeking coverage for

Need info on:

Summary:
Level of difficulty:

**Outfall description**
Pump/Generating Plant Sump
Left Powerhouse Transformer Desk Sump
Left Powerhouse Sump
Left Powerhouse Generator Three (G-3), G-8, Cooling water

Main Dam Galleries
Right Powerhouse Transformer Deck Sump
Right Power House Sump
Right Power House G-11, G-16 cooling water

Third Power plant transformer deck sump

Third Power Plant Sump
Third Power Plant G-19, G-24 Cooling water

wicket gates
line service units
unwatering sump

XL spreadsheet with data sets;fecal source in ourfalls 2 and 3

14 outfalls, three additional coverage, **no fish tanks, fecal detected**
easier

**Pollutants Detected**
BOD, TRC, TOC, ammonia
Fecal, TRC, TOC, ammonia
Fecal, TRC, TOC
Fecal, TRC, TOC, ammonia
Fecal, TRC, TOC
Fecal, TRC, TOC
Fecal, TRC, TOC
BOD, Fecal, TRC, TOC
Fecal, TRC, TOC
Fecal, TRC, Ammonia
Fecal, TRC, TOC
Fecal, TOC
BOD, Fecal, oil and grease, COD, TOC
Fecal, TRC

oil and grease
Check Outfall 4A for similar pollutants
permittee considers water from unwatering sump same as influent and unchanged in discharge

**Notes**

low conc of fecal but detectable
low conc of fecal but detectable
low conc of fecal but detectable

highest levels of fecal (51 mg/L)